XVII. *The Larva of* Eriocephala allionella. By Thomas Algernon Chapman, M.D., F.E.S.

[Read April 6th, 1898.]

At the end of March, 1897, I met with *Eriocephala allionella* near Cannes, and by imprisoning several of the females with damp moss, I succeeded in obtaining eggs in the same way as I had done in the case of *Eriocephala calthella*. In due time these eggs hatched, but though a few of the larvæ appeared to have eaten a little, as evidenced by some coloration of their intestinal contents, nothing further came of the experiment. This was, however, due rather to my travelling about at the time and giving them no fair chance, than to the want of a proper species of moss; which may, however, have been the effective cause of failure. I preserved one specimen of the larva tolerably successfully, and from this example and my recollections of them alive, the remainder having been sacrificed in the attempt to rear them, I am able to give some account of it. Briefly, this account might be reduced to a statement that the larva does not differ to any appreciable extent from that of *calthella*. It is somewhat larger and less flimsy in consequence, and perhaps whiter in colour.

The eggs are a little larger than those of *E. calthella*, but I have not the exact measurement; they are similarly clothed with a snowy exudation of white filaments.

The larva is about 0·95 mm. in length and of the same truncate angular outlines as that of *calthella*. The antennæ are similarly very long, and the true legs and eight pairs of false legs have the same structure, relation and size as in *calthella*. There is an error in my description of the larva of *calthella*, which was first called attention to by Professor H. G. Dyar, to whom I sent specimens; this is as to the number of rows of ball-like appendages. On the first seven abdominal segments, there are ten rows of them and not eight, as stated in my description (Trans. Ent. Soc. Lond. 1894, p. 342). They occur in double rows, a double row on each side of the dorsum, and a double row on each lateral region, and a double row again on each side below

this, the upper members of the last-mentioned double row being balls like the others, the lower forming the series of false feet. That is, if the false feet are taken to be representative of the balls, there are twelve rows, ten of balls and two of feet, only that the two rows of feet do not form a double row of themselves but appear to be the inferior members of the double row of which the lower series of ball appendages is the other. The reason for taking the appendages thus in double rows is that there is a greater distance from one double row to the next, than between the two rows of which it consists. The first thoracic segment has two rows transversely, four in the first and three in the second on either side. The second and third thoracic segments have the two upper pairs of rows on either side as in the following segments, but on each segment the lower row just above the feet has two appendages, one in front of the other.

The eighth abdominal segment has one appendage in this row, but above this it has two transverse rows of two on either side; the ninth segment has three on either side, and the tenth carries the two setæ, which appear to be homologous with cerci rather than with any ordinary tubercles or processes of lepidopterous larvæ. The larva appears also to have a sucker similar to that of *E. calthella*, but I did not happen to see it obviously used by the living larva.

I have not been able as yet to get larvæ of *Panorpa*, but Brauer's account of the larva and especially of the disposition of the tubercles and of the abdominal legs shows that the resemblance between the larvæ of *Panorpa* and *Eriocephala* is very close.

The idea that the bristles on the last abdominal segment are cerci is one requiring fuller investigation; but I fail to imagine what else they can be. It seems impossible to correlate them with any of the ordinary appendages of lepidopterous larvæ, since they are the only bristle-like appendages and are quite different from the ball appendages that probably represent the usual tubercles. It is to be remembered that, though I call them bristles, they are of very large size (for bristles) in comparison with the size of the larva itself, and I do not know what their structure is.